	INN	2222222222	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP
	INN	2222222222	PPPPPPPPPPPP
	INN		
		CCC	PPP PPP
	INN	CCC	PPP PPP
	INN	CCC	PPP PPP
	INN	CCC	PPP PPP
	INN	CCC	PPP PPP
NNNNN N	INN	CCC	PPP PPP
NNN NNN N	INN	CCC	PPPPPPPPPPPP
NNN NNN N	INN	CCC	PPPPPPPPPPP
	INN	CCC	PPPPPPPPPPPP
NNN NNNN		CCC	PPP
NNN NNNN		ččč	PPP
NNN NNNN		ččč	PPP
	NN	ččč	PPP
	NN	ččč	PPP
	NN	ččč	PPP
	NN	CCCCCCCCCCC	PPP
	NN	cccccccccc	PPP
NNN N	NN	2222222222	PPP

AAAAA

NN NN NN

NNNN NNNN NN ! NN I NN NN NN NN NN NN NN

HHHH

HHH

NN	22222222 22222222 22222222 222222222 2222	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP
		\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$

\*\*FILE\*\*ID\*\*NCPSTALIN

89012345678901234567890123456789012345678901234567

%TITLE 'Line Parameter Parse States and Data'
MODULE NCPSTALIN (IDENT = 'V04-000', LIST(NOOBJECT)) = BEGIN

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: Network Control Program (NCP)

ABSTRACT:

States and data for the parsing of NCP line parameters

ENVIRONMENT: VAX/VMS Operating System

AUTHOR: Darrell Duffy , CREATION DATE: 10-September-79

MODIFIED BY:

V03-012 PRD0108 Paul R. DeStefano 23-Jul-1984 Change LINE PROTOCOL NI to LINE PROTOCOL ETHERNET.

V03-011 RPG0011 Bob Grosso 19-Feb-1983 Add LINE BUFFER SIZE, DU-2.

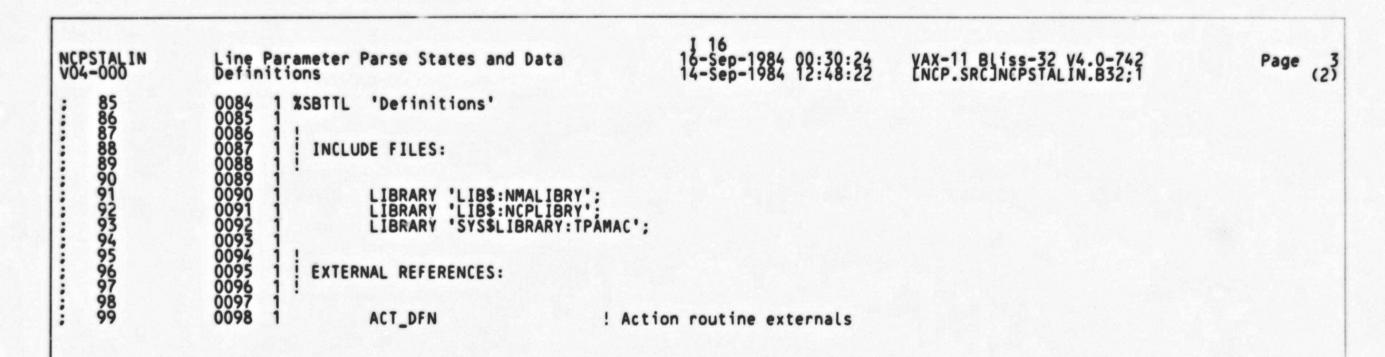
V03-010 RPG0010 Bob Grosso 16-Dec-1982 Include ETHERNET PROTOCOL parsing.

V03-009 RPG0009 Bob Grosso 29-Nov-1982 Remove references to nma\$c\_linpr\_X25 and \_LAP.

V03-008 RPG0008 Bob Grosso 22-Jul-1982 Add LINE PROTOCOL NI add LINE PROTOCOL X25

NCPSTALIN V04-000	Line	Parameter	Parse St	ates and Data
: 58 : 59	0058 0059	11	v03-007	RPG0007 Bob Grosso 28-Jun-1982 Change MAX BLOCK to MAX DATA.
61	0060 0061 0062		V006	TMH0006 Tim Halvorsen 08-Mar-1982 Only prompt for "essential" and "important" parameters.
64 65 67	0064 0065 0066 0067 0068		V005	TMH0005 Tim Halvorsen 08-Jan-1982 Remove TMH0003, thus restoring RETRANSMIT TIMER to a line parameter, which is what NM V3.0 finally came up with.
58 59 61 61 62 63 64 65 66 67 77 77 77 77 77 77 77 77 77 77 77	0069 0070 0071 0072		V004	TMH0004 Tim Halvorsen 2-Dec-1981 Force user to spell out "LAPB" protocol keyword completely, since there is also a LAP protocol, not yet supported by DNA.
74 75 76	0073 0074 0075 0076		V003	TMH0003 Tim Halvorsen 05-Aug-1981 Change RETRANSMIT TIMER to a circuit parameter, rather than a line parameter.
78	0078 0079		V002	TMH0002 Tim Halvorsen 07-Jul-1981 Add line clock parameter.
81 82 83	0077 0078 0079 0080 0081 0082 0083	1 -	V001	TMH0001 Tim Halvorsen 17-Jun-1981 Add new V2.2 line parameters

Page 2 (1)



```
J 16
16-Sep-1984 00:30:24
14-Sep-1984 12:48:22
NCPSTALIN
V04-000
                                 Line Parameter Parse States and Data
Parameter blocks
                                                                                                                                                                                           VAX-11 Bliss-32 V4.0-742 ENCP.SRCJNCPSTALIN.832;1
                                                                                                                                                                                                                                                                        Page
                                                                                                                                                                                                                                                                                   (3)
                                                  *SBITL 'Parameter blocks'
                                BIND DATA:
                                                                   Parameter Blocks
                                                                   BUILD_PCL
                             P
                             P
                                                                    (LIN,
                                                                                                     PCLI STA...
PCLI SER...
PCLI LCT...
PCLI COS...
PCLI DEV...
PCLI DEV...
PCLI DUP...
PCLI CON...
PCLI CON...
PCLI CLO...
PCLI STI...
PCLI MBL...
PCLI MBL...
PCLI MWI...
PCLI MWI...
PCLI STT...
PCLI STT...
PCLI BFN...
                                                                   STA, NUMB,
SER, NUMB,
CTM, NUMW,
                             P
                             P
                             P
                                                                   COS.
DEV.
PRO.
DUP.
                                                                              NUMB.
                             P
                                                                              TKN.
                             P
                                                                              NUMB
                             P
                                                                              NUMB
                                                                   CON.
                             P
                                                                              NUMB:
                                                                   CLO.
                                                                              NUMB.
                                                                   TYP.
                                                                              NUMB
                                                                              NUMW
                             PPP
                                                                   NTM.
                                                                              NUMW
                                                                   HTI,
                                                                              NUMW
                                                                   MBL.
                                                                              NUMW
                                                                   MRT,
                             PPPPPPPPPPP
                                                                              NUMB.
                                                                    MWI,
                                                                              NUMB,
                                                                   TRB,
SLT,
                                                                              NUMB.
                                                                              NUMW.
                                                                   DDT.
                                                                              NUMW
                                                                              NUMW,
                                                                   SRT,
                                                                              NUMW.
                                                                   BFN, NUMW,
                                                                                                     PCLI_MCD...
PCLI_XMD...
PCLI_EPT...
PCLI_BSZ...
                                                                   MCD, TKN,
                                                                   XMD, NUMB,
                                                                   EPT, NUMW,
                                                                   BFS, NUMW.
                             P
                             P
                                                                    . END. . .
                                                                   )
                             000000000
                                                                   BUILD_PBK
                                                                    (LIN,
                                                                   STAON, LITB, NMA$C_STATE_ON, LIN_STA, STAOFF, LITB, NMA$C_STATE_OFF, LIN_STA, STASVC, LITB, NMA$C_STATE_SER, LIN_STA, SEN, LITB, NMA$C_LINSV_ENA, LIN_SER, SDS, LITB, NMA$C_LINSV_DIS, LIN_SER, CTM, NUMW, ...
```

```
K 16
16-Sep-1984 00:30:24
14-Sep-1984 12:48:22
NCPSTALIN
V04-000
                                                                                                                        Line Parameter Parse States and Data Parameter blocks
                                                                                                                                                                                                                                            DEV, TKN,
PROPOI, LITB, NMASC_LINPR_POI, LIN_PRO,
PROCON, LITB, NMASC_LINPR_CON, LIN_PRO,
PROTRI, LITB, NMASC_LINPR_TRI, LIN_PRO,
PRODMC, LITB, NMASC_LINPR_DMC, LIN_PRO,
PROLAP, LITB, NMASC_LINPR_LAPB, LIN_PRO,
PRONI, LITB, NMASC_LINPR_NI, LIN_PRO,
DPF, LITB, NMASC_DPX_FUL, LIN_DUP,
CLB, LITB, NMASC_DPX_HAL, LIN_DUP,
CLB, LITB, NMASC_LINCN_NOR, LIN_CON,
CNM, LITB, NMASC_LINCN_NOR, LIN_CON,
CLE, LITB, NMASC_LINCL_EXT, LIN_CLO,
CLI, LITB, NMASC_LINCL_EXT, LIN_CLO,
TYPPNT, LITB, NMASC_LINTY_POI, CIN_TYP,
TYPCTL, LITB, NMASC_LINTY_CON, LIN_TYP,
TYPTRB, LITB, NMASC_LINTY_TRI, LIN_TYP,
TYPTRB, LITB, NMASC_LINTY_TRI, LIN_TYP,
TYPDMC, LITB, NMASC_LINTY_DMC, LIN_TYP,
STM, NUMW,
NTM, NUMW,
HTI, NUMW,
HTI,
                                                                                                    HTI, NUMW
                                                                                                                                                                                                                                                 MBL, NUMW,
                                                                                                                                                                                                                                                 MRT, NUMB,
                                                                                                                                                                                                                                                   MWI, NUMB,
                                                                                                                                                                                                                                                 TRB.
                                                                                                                                                                                                                                                                                     NUMB,
                                                                                                                                                                                                                                                SLT.
                                                                                                                                                                                                                                                                                     NUMW.
                                                                                                                                                                                                                                                 DDT, NUMW,
                                                                                                                                                                                                                                                                                   NUMW, , ,
                                                                                                                                                                                                                                                 SRT.
                                                                                                                                                                                                                                                                                     NUMW. . .
                                                                                                                                                                                                                                                 BFN, NUMW, , ,
                                                                                                                                                                                                                                              MCD, TKN,
MDDTE, LİTB, NMA$C_X25MD_DTE, LIN_XMD,
MDDCE, LITB, NMA$C_X25MD_DCE, LIN_XMD,
MDDTL, LITB, NMA$C_X25MD_DTL, LIN_XMD,
MDDCL, LITB, NMA$C_X25MD_DCL, LIN_XMD,
                                                                                                                                                                                                                                                EPT, NUMW, . . BFS, NUMW, . .
                                                                                                                                                                                                                                                 )
                                                                                                                      0198
0199
0200
                                                                                                                                                                                                                                               BUILD_SDB
                                                                                                                                                                                                                                                 (LIN, NMASC_ENT_LIN, VRB_ENT, LIN)
```

VAX-11 Bliss-32 V4.0-742 [NCP.SRC]NCPSTALIN.B32;1

(3)

NCPSTALIN V04-000	Line Parameter Prompt strings	Parse States and Data	L 16 16-Sep-1984 00:30:24 14-Sep-1984 12:48:22	VAX-11 Bliss-32 V4.0-742 [NCP.SRC]NCPSTALIN.B32;1
204 205 206 207 208 209 210 211	0201 1 %SBTTL 0202 1 0203 1 ! 0204 1 ! 0205 1 ! 0206 1 0207 1 BIND 0208 1 P 0209 1	'Prompt strings'  Build prompt strings  PROMPT_STRINGS (LIN,		
205 206 200 200 200 200 200 200 200 200 200	0205 1 ! 0206 1 0207 1 BIND 0208 1 P 0209 1 P 0210 1 P 0211 1 P 0213 1 ! P 0214 1 ! P 0215 1 ! P 0216 1 ! P 0217 1 ! P 0218 1 !! P 0221 1 ! P 0222 1 ! P 0223 1 ! P 0223 1 ! P 0224 1 P 0225 1 ! P 0227 1 ! P 0228 1 ! P 0230 1 ! P 0231 1 0232 2 0233 1	BFN, 'Number of receive CLO, 'Clock mode CON, 'Controller mode CTM, 'Counter timer DDT, 'Dead timer DLT, 'Delay timer DEV, 'Device DPX, 'Duplex mode HTI, 'Holdback timer MBL, 'Maximum block	(EXTERNAL, INTERNAL): ',     (NORMAL, LOOPBACK): ',     (1-65535 seconds): ',     (1-65535 milliseconds): ',     (dev-c-u.t): ',     (FULL, HALF): ',     (1-65535 milliseconds): ',     (1-65535): ',	B, ETHERNET): ',

Page 6 (4)

```
M 16
16-Sep-1984 00:30:24
14-Sep-1984 12:48:22
NCPSTALIN
V04-000
                        Line Parameter Parse States and Data
State Table for Line Parameters
                                                                                                                                   VAX-11 Bliss-32 V4.0-742
[NCP.SRC]NCPSTALIN.B32:1
                                    %SBTTL 'State Table for Line Parameters'
    $INIT_STATE (NCP$G_STTBL_LIN, NCP$G_KYTBL_LIN);
                                                SET/DEFINE LINE Parameter States
                                  $STATE (ST_LIN, ((SE_ALL), ST_LIN_DOIT), ! All parameter (TPA$_EOS, , ACT$PMT_ON), ! Prompt if no keywords (TPA$_LAMBDA, ST_LIN_PRC, ACT$PMT_OFF) ! Process keywords
                                                PROMPT_STATES (LIN,
                     2222
                                                                                               ! Prompt for these parameters
                                                BFN, PRO, STA
                                               (ST_LIN_DOIT, (TPA$_EOS, TPA$_EXIT, ACT$VRB_UTILITY, , , SDB$G_LIN),
                                   $STATE
```

Page

NCPSTALIN VO4-000	Line Paramete Dispatch Stat	er Parse States and Data	B 1 16-Sep-1984 00:30:24 14-Sep-1984 12:48:22	VAX-11 Bliss-32 V4.0-742 [NCP.SRC]NCPSTALIN.B32;1	Page 8
263 264 265 266 267 268 277 277 277 277 277 277 277 277 277 27	Dispatch State  0258 1 %SBT1  0259 1  0260 1 !  0261 1 !  0262 1 !  0263 1  P 0264 1 \$STATE  P 0265 1  P 0266 1  P 0267 1  P 0270 1  P 0271 1  P 0272 1  P 0273 1  P 0274 1  P 0275 1  P 0276 1  P 0277 1  P 0278 1  P 0278 1  P 0281 1  P 0282 1  P 0283 1  P 0283 1  P 0284 1  P 0285 1  P 0286 1  P 0287 1  P 0298 1  P 0298 1  P 0299 1	L 'Dispatch States' Dispatch States	16-Sep-1984 12:48:22  ! [V2 only - same as R		Page (6)
296 297 298 299 300 301	P 0291 1 P 0292 1 P 0293 1 P 0294 1 P 0295 1 0296 1	TRB. TRIBUTARY., TYP. TYPE',  (TPA\$_EOS. ST_LIN_DOIT) );			

: 303 : 304 : 305 : 306 : 307 : 308 : 309 : 310 P	0297 1 0298 1 %SBTTL 0299 1 0300 1 !	'Process States'		
311 3112 3113 3114 3115 3116 3116 3117 3117 3118 3119 3119 3119 3119 3119 3119 3119	0301 1 !	Process states  PROCESS_STATES (LIN,  BFS, 'SIZE', CLO., CON., COS, 'TIMER', DDT, 'TIMER', DLT, 'TIMER', DEV., DPX, HTI, 'TIMER', MRT,, MBL, 'TIMER', MBL, 'TIMER', STM, 'SUFFERS', SLT, 'TIMER', STM, SVM, 'STA, STA, 'TIMER', TRB, 'TYP, '  MCD, 'DUMP', XMD, 'PROTOCOL',	! From MAX below ! From MAX below ! From MAX below ! From SVC below ! From SVC below	

N Line P Subexp	Line Parameter Parse States and Data Subexpression States	D 1 16-Sep-1984 00:30:24 14-Sep-1984 12:48:22	VAX-11 Bliss-32 V4.0-742 [NCP.SRC]NCPSTALIN.B32;1
0335 03338 03338 03340 03343 033445 033445 033445 033445 03355 03355 03355 03363 0364	0337 1   Sub_expressions 0339 1		

Page 10 (8)

NO

NCPSTALIN V04-000	Line P Subexp	Parameter pression S	Parse States and Data tates	E 1 16-Sep-1984 00:30:24 14-Sep-1984 12:48:22	VAX-11 Bliss-32 V4.0-742 [NCP.SRC]NCPSTALIN.B32;1	Page 11 (9)
373 374 375 376	0365 0366 0367	]	Dispatch on MAXIMUM keyword			
377	P 0369	SSTATE	(ST_LIN_PRC_MAX,			
379 380	P 0371 P 0372	1	DISPATCH_STATES			
382 383 384 385	P 0374 P 0375 P 0376 P 0377		MBL, 'BLOCK', MRT, 'RETRANSMITS', MWI, 'WINDOW',			
386 387 388	P 0378 0379 0380	1	};			
389 390 391	0381 0382 0383		Dispatch on SERVICE keyword			
378 379 381 3883 3887 3887 3889 3889 3899 3899 401 403 404 405 406	P 0385 P 0386 P 0387 0388 0389	\$STATE	(ST_LIN_PRC_SVC, ((ST_LIN_SVM), ST_LIN_PRC), ('TIMER')			
397 398 399 400	P 0390 P 0391 0392	\$STATE	((ST_LIN_STM), ST_LIN_PRC),			
402	0393 P 0394 P 0395	SSTATE	(ST_LIN_SVM,			
404	P 0394 P 0395 P 0396 P 0397 P 0398	1	KEYWORD_STATE			
406	P 0398 P 0399	1	SEN, 'ENABLED', SDS, 'DISABLED',			
408	P 0400 P 0401 P 0402		SDS, 'DISABLED',			
411	0403	1	<b>5</b> :			
407 408 410 411 412 413 414 415 416 417 418 420 421 423 424 425 427 428 429	P 0400 P 0401 P 0402 0403 0404 0405 0406 0407 0408 P 0410 P 0411 P 0413 P 0415 P 0416 P 0417 P 0418 P 0419 P 0421	11	Protocol			
416	P 0409 P 0410	SSTATE	(ST_LIN_PRO,			
419	P 0411 P 0412 P 0413		('LAP', TPAS_FAIL),	! Force LAPB to be spe ! allow for LAP protoco	lled out to ol in the future	
422	P 0414 P 0415 P 0416	1	KEYWORD_STATE			
425 426 427	P 0417 P 0418 P 0419	1	PROLAP, 'LAPB', PRONI, 'ETHERNÉT',			
428	P 0420 P 0421	1	).			

NC VO

H 1 16-Sep-1984 00:30:24 VAX-11 Bliss-32 V4.0-742 14-Sep-1984 12:48:22 [NCP.SRC]NCPSTALIN.B32;1 Line Parameter Parse States and Data Subexpression States NCPSTALIN V04-000 Page 14 (9) : 544 P 0536 1 0537 1 );

NC VO

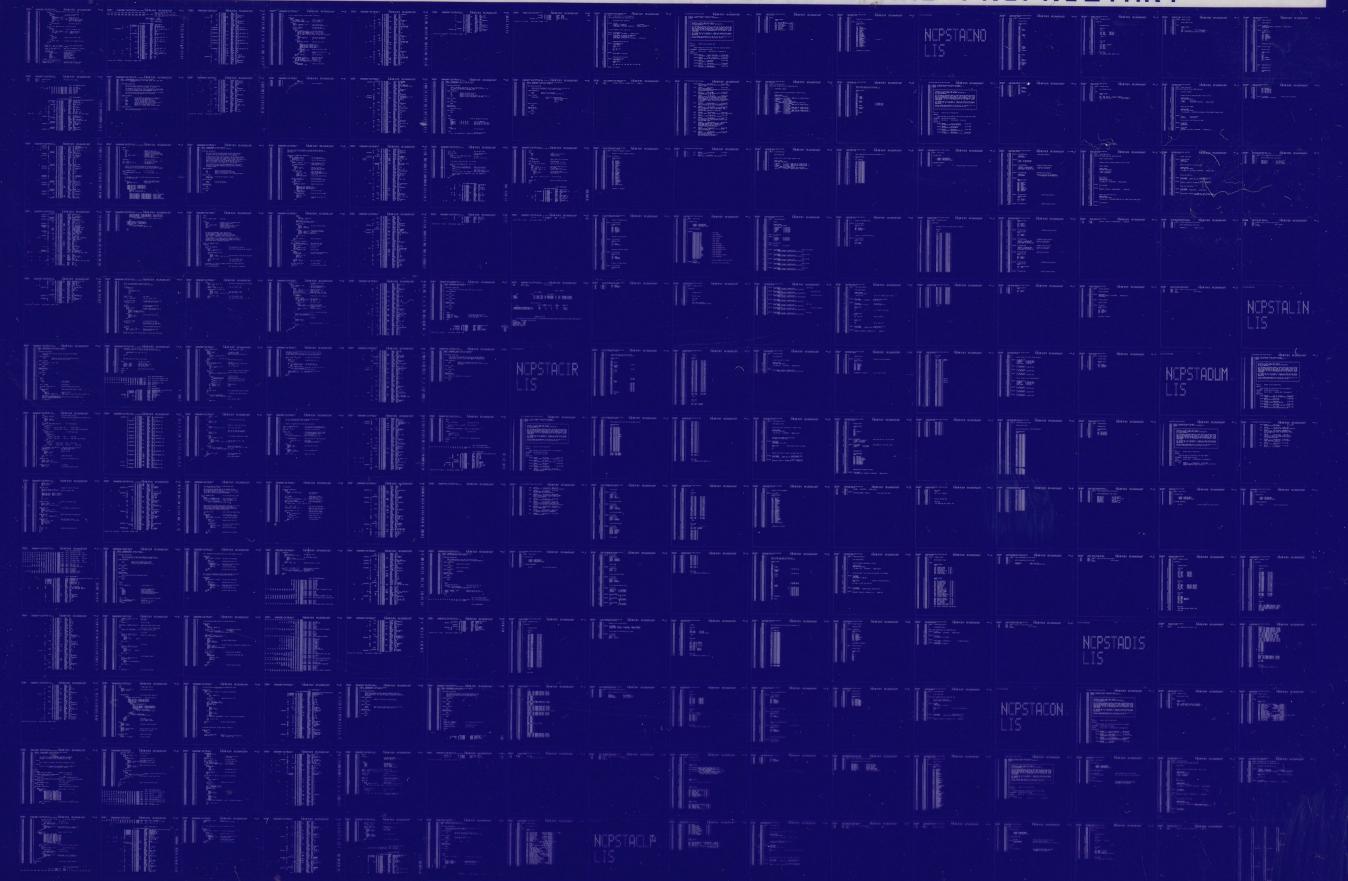
CPSTALIN	Line Parameter P Define Subexpres	arse States and Data sions	16-Sep-1984 00:30:24 14-Sep-1984 12:48:22	VAX-11 Bliss-32 V4.0-742 ENCP.SRCJNCPSTALIN.B32;1	Page 19
547 549 551 5552 5553 5555	0539 1 0540 1 !	'Define Subexpressions Define Subexpressions			
552 553 554 555	0541 1 ! 0542 1 ! 0543 1 0544 1 0545 1 0546 1	SEM_ALL SEM_FILE_ID SEM_LINE_ID	! All parameter ! File spec ! Device name string		

J 1 16-Sep-1984 00:30:24 14-Sep-1984 12:48:22 NCPSTALIN VO4-000 Line Parameter Pare States and Data Object Listing of Parse Table VAX-11 Bliss-32 V4.0-742 [NCP.SRCJNCPSTALIN.B32;1 Page 16 (11) 1 %SBTTL 'Object Listing of Parse Table' 557 558 559 560 1 END 0 ELUDOM !End of module

NO

0269 AH-BT13A-SE

DIGITAL EQUIPMENT CORPORATION CONFIDENTIAL AND PROPRIETARY



0270 AH-BT13A-SE

## DIGITAL EQUIPMENT CORPORATION CONFIDENTIAL AND PROPRIETARY

